

## The USGS/National Park Service Vegetation Mapping Program

As part of the National Biological Information Infrastructure (NBII) Program, the U.S. Geological Survey (USGS) is cooperating with the National Park Service (NPS) to produce detailed, computerized maps of the vegetation of approximately 250 National Park units across the United States. Through this undertaking — the USGS/NPS Vegetation Mapping Program (<http://biology.usgs.gov/npsveg>) — a variety of data and information on vegetation are being made available to Internet users through the NBII.

The Vegetation Mapping Program is an important component of the Park Service's natural resources Inventory and Monitoring Program. Using a set of standards and flexible protocols, Vegetation Mapping Program scientists and technicians are developing consistent and standard vegetation information products for all of the approximately 250 National Park units with natural resources. The minimum standard product for each park is a digital map that meets National Mapping Accuracy Standards at a scale of 1:24,000. Park vegetation is mapped to a minimum mapping unit of 1/2 hectare at the cover type/community type level of the Federal Geographic Data Committee's (FGDC) National Vegetation Classification Standard (<http://biology.usgs.gov/fgdc.veg>).

Other products for each park include:

- A field plot database that is used to characterize park vegetation classes and to provide accuracy assessment statistics of the map products, and

- A vegetation classification description and keys.

FGDC-compliant metadata are produced for all products, including digital and hardcopy maps, as well as tabular information and customized products. A set of stringent quality control procedures has also been implemented to ensure products are accurate and consistent for initial inventory purposes and replicable for monitoring purposes, as well as for systematic comparisons at different time periods and at different levels and geographic areas across the United States.

Because all digital products from the Vegetation Mapping Program are being made available through the NBII, other producers and users of vegetation data and information will be able to locate, retrieve, and utilize the product(s) that best meet their needs.

One tool that has been developed through the Vegetation Mapping Program is the PLOTS database, which is used to capture and analyze field survey information on vegetation. The PLOTS tool will also be available for others to use in implementing field or mapping studies of vegetation or for use in helping document and standardize the lower levels (i.e., cover type and community type) in the FGDC National Vegetation Classification Standard. These more detailed levels are not yet fleshed out within the National Classification Standard. Use of the PLOTS tool, together with the NBII information sharing network, could help provide a framework for many different

collaborating agencies, organizations, and scientists to cooperate in naming and describing the thousands of different vegetation cover and community types known to exist in the United States.

As Federal agencies and others start to describe and map vegetation using the National Vegetation Classification Standard, or to “reclassify” and/or “cross-walk” existing vegetation information to the National Standard, exciting opportunities exist to develop and share more comparable vegetation information at different

classification and spatial scales nationwide. This will allow — for the first time — well-defined analyses and “apples to apples” comparisons over landscapes at different scales and across administrative boundaries. The NBII can help to facilitate this broad cooperative process by assisting in the refinement of the National Vegetation Classification standard, by simplifying the creation of metadata (via MetaMaker <http://www.nbii.gov/datainfo/metadata/tools/metamaker.html>) needed for data discovery and use, and by expediting the exchange of vegetation data and information.